

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of synthesizing speech using discourse function level prosodic features comprising the steps of:

determining a theory of discourse analysis from a plurality of theories of discourse analysis;

determining input text;

determining discourse functions in the input text, the discourse functions being determined based on a mapping between basic discourse constituents of the determined theory of discourse analysis and a plurality of discourse functions;

determining a model of discourse function level prosodic features; and

determining adjusted synthesized speech output based on the discourse functions in the input text, [[and]] the model of discourse function level prosodic features, and the input text.

2. (previously presented): The method of claim 1, wherein the discourse functions are determined based on the determined theory of discourse analysis.

3. (original): The method of claim 2, in which the theory of discourse analysis is at least one of: the Linguistic Discourse Model, the Unified Linguistic Discourse Model, Rhetorical Structures Theory, Discourse Structure Theory and Structured Discourse Representation Theory.

4. (previously presented): The method of claim 1, wherein the input text is dynamically generated by another application.

5. (currently amended): The method of claim 1, wherein determining the adjusted synthesized speech output further comprises the steps of:

~~determining a synthesized speech output based on the input text;~~
determining discourse function level prosodic feature adjustments; and
determining the adjusted synthesized speech output based on the synthesized speech output and the discourse level prosodic feature adjustments.

6. (previously presented): The method of claim 1, wherein the model of discourse function level prosodic features is a predictive model of discourse functions.

7. (original): The method of claim 6, in which the predictive models are determined based on at least one of: machine learning and rules.

8. (original): The method of claim 1, in which the prosodic features occur in at least one of a location: preceding, within and following the associated discourse function.

9. (original): The method of claim 1, in which the prosodic features are encoded within a prosodic feature vector.

10. (original): The method of claim 9, in which the prosodic feature vector is a multimodal feature vector.

11. (previously presented): The method of claim 1, in which the discourse functions include an intra-sentential discourse function.

12. (previously presented): The method of claim 1, in which the discourse functions include an inter-sentential discourse function.

13. (currently amended): A method of synthesizing speech using discourse function level prosodic features comprising the steps of:

determining input text;

determining discourse functions in the input text based on a contextually aware theory of discourse analysis using a mapping between basic discourse constituents of the contextually aware theory of discourse analysis and a plurality of discourse functions;

determining a model of discourse function level prosodic features; and

determining adjusted synthesized speech output based on the discourse functions, [[and]] the model of discourse function level prosodic features, and the input text.

14. (original): The method of claim 13, in which the context is at least one of: semantic, pragmatic, and syntactic context.

15. (currently amended): A system for synthesizing speech using discourse function level prosodic features comprising:

an input/output circuit for retrieving input text; and

a processor that determines a theory of discourse analysis from a plurality of theories of discourse analysis based on the speech to be synthesized; determines discourse functions in the input text based on a mapping between basic discourse constituents of the determined theory of discourse analysis and a plurality of discourse functions; determines a model of discourse function level prosodic features; and which determines adjusted synthesized speech output based on the discourse functions, [[and]] the model of discourse function level prosodic features, and the input text.

16. (previously presented): The system of claim 15, wherein the discourse functions are determined based on the theory of discourse analysis.

17. (original): The system of claim 16, in which the theory of discourse analysis is at least one of: the Linguistic Discourse Model, the Unified Linguistic Discourse Model, Rhetorical Structures Theory, Discourse Structure Theory and Structured Discourse Representation Theory.

18. (previously presented): The system of claim 15, wherein the input text is generated by another application.

19. (previously presented): The system of claim 15, wherein the processor determines a synthesized speech output based on the input text; determines discourse function level prosodic

feature adjustments; and determines adjusted synthesized speech output based on the synthesized speech output and the discourse level prosodic feature adjustments.

20. (original): The system of claim 15, wherein the model of discourse function level prosodic features is a predictive model of discourse functions.

21. (original): The system of claim 20, in which the predictive models are determined based on at least one of: machine learning and rules.

22. (original): The system of claim 15, in which the prosodic features occur in at least one of a location: preceding, within and following the associated discourse function.

23. (original): The system of claim 15, in which the prosodic features are encoded within a prosodic feature vector.

24. (original): The system of claim 23, in which the prosodic feature vector is a multimodal feature vector.

25. (original): The system of claim 15, in which the discourse function is an intra-sentential discourse function.

26. (original): The system of claim 15, in which the discourse function is an inter-sentential discourse function.

27. (currently amended): A system for synthesizing speech using discourse function level prosodic features comprising:

an input/output circuit for retrieving input text; and

a processor that determines discourse functions in the input text based on a context aware theory of discourse analysis using a mapping between basic discourse constituents of the contextually aware theory of discourse analysis and a plurality of discourse functions; determines a model of discourse function level prosodic features; and which determines adjusted synthesized speech output based on the discourse functions, [[and]] the model of discourse function level prosodic features, and the input text.

28. (original): The system of claim 27, in which the context is at least one of: semantic, pragmatic, and syntactic context.

29. (currently amended): A carrier wave encoded to transmit a control program, useable to program a computer to synthesize speech using discourse level prosodic features, to a device for executing the program, the control program comprising:

instructions for determining a theory of discourse analysis from a plurality of theories of discourse analysis based on the speech to be synthesized;

instructions for determining input text;

instructions for determining discourse functions in the input text, the discourse functions being determined based on a mapping between basic discourse constituents of the determined theory of discourse analysis and a plurality of discourse functions;

instructions for determining a model of discourse function level prosodic features; and
instructions for determining adjusted synthesized speech output based on the discourse
functions, [[and]] the model of discourse function level prosodic features, and the input text.

30. (currently amended): Computer readable storage medium comprising: computer
readable program code embodied on the computer readable storage medium, the computer
readable program code usable to program a computer to synthesize speech using discourse level
prosodic features comprising the steps of:

determining a theory of discourse analysis from a plurality of theories of discourse
analysis based on the speech to be synthesized;

determining input text;

determining discourse functions in the input text, the discourse functions being
determined based on a mapping between basic discourse constituents of the determined theory of
discourse analysis and a plurality of discourse functions;

determining a model of discourse function level prosodic features; and

determining adjusted synthesized speech output based on the discourse functions, [[and]]
the model of discourse function level prosodic features, and the input text.